

The changing role of regulation in the bio-based economy: an introduction

Regulation has been broadly defined as a sustained and focused control exercised by a public agency over activities that are valued by a community. As such it has been a major concern of policymakers in a range of fields from financial to industrial and agricultural activities. Examples of regulatory areas in the bio-based economy are risk, health, environment, competition, intellectual property rights. Regulations in all these areas have deep implications for trade issues, global value chains and for the provision of public goods.

For most of the twentieth century, regulation has been considered the primary instrument to deal with market failures and market imperfections in western economies and a number of new regulatory agencies have been created. Starting from the 90s, however, as the private and public costs of regulation have become more apparent, an effort has been devoted to the reduction of the cost of regulation and toward deregulation. As an example, the Better Regulation agenda adopted by the European Commission in 2015 has been designed to improve regulation across EU countries with the final objective of reducing its cost.

In the EU, regulations concerning food retailing, food processing, farming activities, tariff and non-tariff barriers to trade as well as financial markets have deeply affected the bio-based sectors. The objective of these regulations is guaranteeing food security and food safety to final consumers and a sustainable management of natural resources such as land, water and the rural environment. There is no doubt that, in these areas, the role of EU policies has increased dramatically and questions have been raised on the effectiveness, efficiency and equity of such regulations. In recent years, firms working in agricultural and food production, bioenergy and biotechnology have often protested against the supposed “invasive” role of EU regulations in their activities. How a viable balance between regulation and deregulation ought to be attained is both a political and a scientific question.

The aim of the fifth AIEAA Conference, held in Bologna, June 16-17, 2016, has been to provide a scientific contribution to these issues by expanding the knowledge base on the fundamentals of better regulation, by promoting a critical debate on the underlying theoretical and methodological issues and by analysing the main policy implications. The Conference Programme included around 50 papers addressing issues such as cost-benefit analysis of regulation, design of enforcement rules, nudge approaches to consumer regulation, political economy of regulation, intellectual property rights, regulation of quality standards and global value chains, innovation in methods and tools for regulatory impact analysis. The BAE Editor invited some of the speakers to submit their papers for publication on this BAE issue. The papers published in this issue have gone through a regular review process and are a selection of the topics covered in the Conference.

The paper by Stephane Marette analyses the relationships between quality, market mechanisms and regulations in the food chain, emphasizing the relationships between quality and sustainability. Through a partial equilibrium model and a simulation concerning the use of linseed for feeding dairy cows, the paper concludes that instruments like minimum quality standards and labelling may have a positive impact on consumer surplus and on producer profits. Through a structured literature review, Alessandro Olper explores the political economy issues of trade-related regulatory policies, with a special focus on non-tariff measures (NTMs), such as environmental and food standards. Focusing on both theory and existing empirical evidence, the paper analyses the role of global value chains as driver of the potential impact of policies. Francesca Galli and co-authors analyse a case study of food assistance schemes in Tuscany: adopting a participatory approach, they examine pathways for strengthening the impact of food assistance schemes in periods of economic crisis. The paper by Michele Vollaro and co-authors addresses the issue of the increasing demand of phosphorus (P) worldwide and the stability of the fertilizer market. Based on a circular economy theoretical framework, the paper proposes an impact analysis of the use of recycled P as a substitute of chemical P fertilizers, proving its potential economic sustainability. Finally, Giovanni Tagliabue proposes a political economy analysis of the EU GMO maize policy, concluding that the Schumpeterian approach adopted by politicians may lead to policy choices totally disconnected by science-based evidences.

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